**Predictions of monsoon, earthquakes, etc.**

*170. SHRI PRAMOD MAHAJAN: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether predictions of monsoon, earthquakes, energy, healthcare and water management have become vital for the overall development of the country;

(b) if so, what strenous efforts are in the pipeline of making accurate and timely predictions; and;

(c) by when these would start giving their results?

THE MINISTER OF PANCHAYATI RAJ AND THE MINISTER OF YOUTH AFFAIRS AND SPORTS (SHRI MANI SHANKAR AIYAR): (a) to (c) Accurate prediction of monsoon is important for economic growth of the country. For monsoon prediction, there are two types of models, statistical and dynamical. IMD has been using a statistical model developed indigenously over the years. IMD is also preparing experimental long range forecast based on dynamical model and is continuously testing the efficiency of dynamical models in making acurate predictions. However, more research is required and efficacy of the dynamic models will only be determined when the forecasts prepared through this model are compared with actual observations over a period of time.

Though capability to correctly predict earthquakes can minimize loss of life and property, however, at present there is no specific technique available anywhere in the world to predict the occurrence of earthquakes with reasonable degree of accuracy with regard to space, time & magnitude. India Meteorological Department (IMD) monitors earthquakes and provides timely information to concerned officials for rescue and relief. Government of India has taken up initiatives for conducting research in Earthquake Precursory studies through multi-parametric geophysical observations in a multi-institutional mode. These efforts are expected to lead to the development of models for earthquake prediction in future.

As far as the area of energy, healthcare and water management are concerned they are vital for the overall development of the country. However, it is difficult to understand the import of the predictions in these areas. Scientific research and development is an ongoing process, which

leads to continuous improvements in prediction capabilities, however, it is not possible to provide a time frame due to the inherent nature of the activity.

**Hotel accommodation by 2010**

*171. SHRI LALIT SURI: Will the MINISTER OF URBAN DEVELOPMENT be pleased to state:

(a) the details of the proposal under Government's consideration to provide for additional hotel accommodation and other infrastructure in Delhi and in the National Capital Region before the Commonwealth Games to be held in Delhi in 2010;

(b) whether any private parties are likely to be associated for providing additional hotel accommodation in Delhi and the NCR and the extent of their participation therein; and

(c) the extent of expenditure likely, to be incurred on the projects?

THE MINISTER OF STATE IN THE MINISTRY OF URBAN DEVELOPMENT (SHRI AJAY MAKEN): (a) to (c) The Delhi Development Authority has reported that it has taken up development of hotel sites in different parts of Delhi for meeting the requirement of additional hotel accommodation for the Commonwealth Games. It has already developed 22 plots. It proposes to offer these plots for development through auction Private individuals/firms/companies are permitted to participate in the auction of hotel sites. The construction of hotels will be done by the auction purchaser and hence no expenditure will be incurred by the Government.

The National Capital Region Planning Board has reported that there is no specific proposal for development of additional hotel sites in the context of Commonwealth Games in the NCR States of Haryana, UP and Rajasthan.

Govt, of NCT of Delhi has informed that it has prepared an action plan for creation of various infrastructure facilities such as roads, water supply, sewer disposal, transport, health, power, etc. for the forthcoming Commonwealth Games and has sought additional funds of Rs. 1340 crore in addition to their regular plan schemes.